

AMENDMENTS TO THE CLAIMS

1. – 64. (canceled)

65. (Previously Presented) A system for locating a target volume in a patient, comprising:

a first active marker that generates a detectable energy in response to an excitation energy, the first active marker having a body without external lead wires projecting therefrom, and wherein the body comprises a biocompatible capsule having a section with a diameter of 1-2 mm;

a second active marker that generates a detectable energy in response to an excitation energy, and wherein the second active marker is positionable relative to the first active marker; and

a detector configured to receive the detectable energy generated by the first and second active markers.

66. (Previously Presented) The system of claim 65 wherein:

the first active marker comprises a first power detector/regulator and a first RF generator coupled to the first power detector/regulator, wherein the first power detector/regulator generates power in response to an excitation energy, and wherein the first RF generator generates a detectable energy using the power generated by the first power detector/regulator; and

the second active marker comprises a second power detector/regulator and a second RF generator coupled to the second power detector/regulator, wherein the second power detector/regulator generates power in response to an excitation energy, and wherein the second RF generator generates a detectable energy using the power generated by the second power detector/regulator.

67. (Previously Presented) The system of claim 65 wherein the first marker generates a first detectable energy and the second marker generates a second detectable energy that is distinguishable from the first detectable energy.

68. (Previously Presented) The system of claim 65 wherein the first marker generates a first detectable energy and the second marker generates a second detectable energy that is the same as the first detectable energy.

69. (Previously Presented) A system for locating a target volume in a patient, comprising:

at least one marker defining a discrete element configured to be implanted and remain in the patient at a single location relative to the target volume, and wherein the at least one marker comprises an active marker that emits a detectable energy in response to an excitation energy and has a body without external lead wires projecting outwardly from the body, and wherein the body comprises a biocompatible capsule having a section with a diameter of 1-2 mm;

a probe having a device that generates a location signal in response to the detectable energy generated by the active marker; and

a detector configured to receive the location signal from the probe, the detector providing an indication of the position of the probe relative to the at least one marker.

70. (Previously Presented) The system of claim 69 wherein:

the at least one marker comprises an active marker that generates a detectable energy in response to a magnetic excitation energy; and

the detector comprises a sensor that detects the detectable energy generated by the active marker.

71. (Previously Presented) The system of claim 69 wherein:
the detector comprises an antenna configured to receive the detectable energy.

72. (Previously Presented) The system of claim 69 wherein:
the at least one marker comprises an active marker having a power detector/regulator and an RF generator coupled to the power detector/regulator, wherein the power detector/regulator generates power in response to the excitation energy, and wherein the RF generator generates a detectable energy using the power generated by the power detector/regulator; and
the detector comprises an antenna configured to receive the detectable energy generated by the RF generator.

73. (Previously Presented) The system of claim 69 wherein the at least one marker comprises a plurality of markers including:

a first active marker defining a discrete implantable element, wherein the first active marker generates a detectable energy in response to an excitation energy;
and
a second active marker positionable relative to the first active marker, wherein the second active marker generates a detectable energy in response to an excitation energy.

74. (Previously Presented) A system for locating a target volume in a patient, comprising:

a plurality of markers including (a) a first active marker defining a discrete implantable element, wherein the first active marker generates a first detectable energy in response to a magnetic excitation energy, and wherein the first active marker has a first body comprising a first biocompatible capsule having a section with a diameter of 1-2 mm that is configured to fit in

a standard implanter needle for implantation in the patient; and (b) a second active marker positionable relative to the first active marker, wherein the second active marker generates a second detectable energy different than the first detectable energy in response to another magnetic excitation energy, and wherein the second active marker has a second body comprising a second biocompatible capsule having a cylindrical section with a diameter of 1-2 mm; and

a detector comprising a sensor configured to distinguish the first detectable energy generated by the first active marker from the second detectable energy generated by the second active marker.

75. (Previously Presented) A system for locating a target volume in a patient, comprising:

a first active marker that generates a detectable energy in response to an excitation energy, the first active marker having a body without external lead wires projecting outwardly from the body, and wherein the body comprises a biocompatible capsule having a section with a diameter of 1-2 mm;

a second active marker that generates a detectable energy in response to an excitation energy, and wherein the second active marker is positionable relative to the first active marker; and

a sensor configured to distinguish the first and second detectable energies generated by the first and second active markers.

76. (Previously Presented) The system of claim 75 wherein:

the first active marker comprises a first power detector/regulator and a first RF generator coupled to the first power detector/regulator, wherein the first power detector/regulator generates power in response to an excitation energy, and wherein the first RF generator generates a detectable energy using the power generated by the first power detector/regulator; and

the second active marker comprises a second power detector/regulator and a second RF generator coupled to the second power detector/regulator, wherein the second power detector/regulator generates power in response to an excitation energy, and wherein the second RF generator generates a detectable energy using the power generated by the second power detector/regulator.

77. (Previously Presented) A system for locating a target volume in a patient, comprising:

a first active marker that generates a detectable energy in response to a magnetic excitation energy, the first active marker having a body without external lead wires projecting outwardly from the body, and wherein the body comprises a biocompatible capsule having a section with a diameter of 1-2 mm;

a second active marker that generates a detectable energy in response to another magnetic excitation energy, and wherein the second active marker is positionable relative to the first active marker; and

a sensor configured to distinguish the first and second detectable energies generated by the first and second active markers.